A real fall feel, La Nina builds, and Water Year Information

A cool, regularly rainy pattern has kicked off this hydrologic water year, with a few systems lined up and on their way in. October is a transition month, that sometimes brings only scant precipitation. While we are not setting any records, the active weather pattern is welcome this month.

Rainfall totals from the Tuesday to Wednesday morning system:

Quincy	.58"
Sawyer's Bar	.38"
Gasquet	2.12"
Crescent City	1.47"
Donner Creek	.55"
Venado	1.40"
Sac Met/Int	.68"
Oroville Dam	1.16"
Coe Park	.17"
Yorkville	1.64"

with the Monterey National Weather Service Office reporting over 2.5" across the North Bay Mountains.

Two more low pressure areas (and associated cold fronts) will sweep through. The first on Friday, the second on or about Monday/Tuesday.
Timing differences are appearing in the models, now, with the NAM12K (a higher resolution, but shorter duration model) showing the first system a bit slower than some of the wider scale models. Looks like the Friday wave will have less precipitable water, and weaker dynamics, making for lower rainfall totals than last night's. The GFS model puts in the most jet forcing, with the Friday system further south than the other models.

The system on it's heels will tarry enough to give us a nice weekend.
Then, on Monday night through early Wednesday, there should be a windier, stormier set up. This system (or possibly group of waves) looks stronger, and could have lower snow levels. On its heels, a few more systems may make for a soggy week from the 15th-19th.

The Climate Prediction Center has been measuring the strengthening La Nina. They are predicting La Nina conditions will develop further over the next 3 months, and will persist until at least the beginning of
2008. Negative sea surface temperature anomalies in the Eastern

Equatorial Pacific now extend westward to the Date Line. In Northern California, La Nina provides less of a clear, definitive weather influence than can (sometimes) be experienced during a good, strong El Nino. So, the way things look right now for the next several months, we will have a weak to moderate La Nina. Interior Northern California has experienced both anomalously wet and dry water years under the influence of this pattern. The Pacific Northwest will likely experience a wet winter. Southern California is likely to get a slap-in-the-face from Mother Nature, with a drier than normal pattern. That dry trend will impact all of the Southwest. Overall, the statistics point to a wet first half of winter for NorCal, followed by an early tapering off (drier conditions) from January onward. The best scenario for NorCal might be for the La Nina to stay weak. Perhaps that would allow this moist start to be followed by at least an average season, rather than the mid-winter shut down that is a real possibility. There is no real positive news here for Southern California, nor much likelihood that this will turn into a wet, or even normal water year for them. (Special thanks to the National Weather Service Office). For more information:

http://www.cpc.noaa.gov/products/precip/CWlink/MJO/enso.shtml

The hydrologic water year began on October 1. This is a different measurement period than the one typically used in the public, which is the precipitation year for the National Weather Service locally.
Sacramento and other city's rainfall totals are calculated starting July 1. But for snowpack, and runoff, the year runs from October 1 until the following September 30th. We like to be as confusing as possible in water management :) For the Sacramento River basin the 2006-2007 water year finished as the 18th driest in the 102 year record of stream flow measurements. The San Joaquin River region was drier, finishing up as 8th driest, based on preliminary information. The Northern Sierra snowpack was measured at 40% of normal on April 1, 2007; the lowest since 1988. Early melting reduced the snowpack to only 25% of average by May 1. Overall precipitation for the state ended at 60 to 65% of average.

The current "season" gets underway in earnest next week, as forecasters take their positions and shifts for operations mode for the winter. A great new climate station summary is available on line, which will allow for seasonal precipitation totals (July 1 - June 30) to be tracked daily for many locations across the State:

http://www.cnrfc.noaa.gov/awipsProducts/RNOWRKCLI.php

According to the National Water and Climate Center in Portland, Oregon, the western US had a less than average to dismally small snowpack,
overall last year. California, Nevada, Utah, Southern Oregon, Southern

Idaho, parts of Wyoming, Arizona, and Alaska reported much lower than average precipitation for the year. The best snowpack of the year was reported in the Washington Cascade Mountains.

Will try to have another letter out next Wednesday.

Special shout out to Bill Mork, who visited the Department a couple weeks ago from retirement in Florida!

(EL)
